



# REVISTA BRASILEIRA DE REUMATOLOGIA

[www.reumatologia.com.br](http://www.reumatologia.com.br)



## Editorial

# Neuropsychiatric manifestations in autoimmune diseases



## Manifestações neuropsiquiátricas em doenças autoimunes

Neuropsychiatric manifestations in autoimmune diseases are often observed; they are associated with increased morbidity and mortality and with a poorer quality of life. Although their classification is carried out on a more systematic basis in systemic lupus erythematosus (SLE) when compared to other diseases – in part because of its prevalence and diagnostic difficulties – their importance cannot be ignored in other rheumatic diseases.

When patients with autoimmune diseases present with neuropsychiatric manifestations, we emphasize the importance of the exclusion of comorbidities, infections and side effects related to medications. In SLE, only 40% of primary manifestations are related to disease activity.<sup>1</sup>

The study by van Weelden et al.<sup>2</sup> raises an important point: the use of alcohol and illicit drugs in juvenile SLE. The use of alcohol and illicit drugs is associated with neuropsychiatric manifestations, but according to population studies, it can also promote the development of psychiatric disorders in the absence of autoimmune diseases.<sup>3,4</sup> In their study, van Weelden et al.<sup>2</sup> observed a high frequency of alcohol use among adolescents with SLE (38%), but similar to matched controls; but with a low risk for illegal substances and dependence in JSLE patients.

In the study by Aikawa et al.,<sup>5</sup> the authors observed a low frequency of hepatitis C in patients with JSLE versus controls (2.5% vs. 0%,  $p=1.0$ ). Hepatitis C must be routinely screened in patients with autoimmune manifestations; this disease is associated with neuropsychiatric manifestations.<sup>6</sup>

With regard to primary neuropsychiatric manifestations, Costallat et al.,<sup>7</sup> in their analysis of a large cohort of patients with SLE, observed a prevalence of 14 (1.2%) patients with myelopathy. Myelopathy occurred independently of the association with disease activity, and no patient was benefited with a complete recovery. Deaths occurred in 3 (21%) patients during an episode of myelopathy, but these were due to complications related to treatment.

Infectious complications are often observed in SLE patients and are associated with high mortality rates, particularly in the early years of the disease. Disease activity and immunosuppression are important risk factors. The study by Simioni et al.<sup>8</sup> showed that low Vitamin D levels are associated with leukopenia. Longitudinal studies with appropriate replacement of vitamin D are needed in order to assess whether adequate levels of vitamin D may help in the improvement of leukopenia and in reducing infection in patients with SLE, thus improving mortality.

## Conflicts of interest

The author declares no conflicts of interest.

## REFERENCES

1. Postal M, Costallat LT, Appenzeller S. Neuropsychiatric manifestations in systemic lupus erythematosus: epidemiology, pathophysiology and management. *CNS Drugs*. 2011;25(9):721–36.
2. van Weelden M, Queiroz LB, Lourenço DMR, Kozu K, Lourenço B, Silva CA. Uso de álcool, tabaco e drogas ilícitas por pacientes com lúpus eritematoso sistêmico de início na infância. *Rev Bras Reumatol*. 2016;56:228–34.
3. Auer R, Vittinghoff E, Yaffe K, Kunzi A, Kertesz SG, Levine DA, et al. Association between lifetime marijuana use and cognitive function in middle age: the Coronary Artery Risk Development in Young Adults (CARDIA) study. *JAMA Intern Med*. 2016;176(3):352–61.
4. Helle S, Gjestad R, Johnsen E, Kroken RA, Jørgensen HA, Løberg EM. Cognitive changes in patients with acute phase psychosis – effects of illicit drug use. *Psychiatry Res*. 2014;220(3):818–24.
5. Aikawa NE, Nascimento AP, Hayata ALS, Bonfá E, Goldenstein-Schainberg C. Anticorpos contra o vírus da hepatite C em pacientes de alto risco com lúpus eritematoso sistêmico de início juvenil. *Rev Bras Reumatol*. 2016;56:235–9.

6. Adinolfi LE, Nevola R, Lus G, Restivo L, Guerrero B, Romano C, et al. Chronic hepatitis C virus infection and neurological and psychiatric disorders: an overview. *World J Gastroenterol.* 2015;21(8):2269-80.
7. Costallat BL, Ferreira DM, Costallat LTL, Appenzeller S. Mielopatia no Lúpus eritematoso sistêmico: achados clínicos, laboratoriais, radiológicos e evolutivos em uma coorte de 1193 pacientes. *Rev Bras Reumatol.* 2016;56:240-51.
8. Simioni JA, Heimovski F, Skare TL. Acerca do lúpus, vitamina D e leucopenia. *Rev Bras Reumatol.* 2016;56:206-11.

Simone Appenzeller

*Faculdade de Ciências Médicas, Universidade Estadual de Campinas (UNICAMP), Campinas, SP, Brazil*

E-mail: [appenzellersimone@yahoo.com](mailto:appenzellersimone@yahoo.com)

2255-5021/© 2016 Published by Elsevier Editora Ltda. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).  
<http://dx.doi.org/10.1016/j.rbre.2016.03.013>